

The Use of Alkaline Herbs in the Prevention and Treatment of any Cancerous Condition

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Abstract

An anti-cancer lifestyle and diet is an important strategy you can use to reduce your risk for ANY cancerous condition. The American Cancer Society recommends, for example, that you eat at least five servings of fruit and vegetables daily and eat the right amount of (alkaline) food to stay at a healthy weight. In addition, researchers are finding that certain plant foods or herbs may be particularly useful in protecting and reversing many cancerous conditions. The following article covers several of these medicinal herbs and their benefits in the prevention and treatment of brain cancer, lung cancer, breast cancer, blood cancers, prostate cancer, oral cancer, liver cancer thyroid cancer, kidney cancer, bowel cancer, stomach cancer, skin cancer and pancreatic cancer.

Keywords: Cancer; Chemotherapy; Herbs; Spices; Natural cancer treatments; Garlic; Turmeric; Ginger; Cayenne; Alkalizing; Liver disease; Oral cancer; Prostate cancer; Blood cancer; Breast cancer; Thyroid cancer; Stomach cancer; Skin cancer; Pancreatic cancer; Lung cancer; Bowel cancer

Introduction

Make room in your diet for the following foods and drinks to prevent cancer. Why? Because an ounce of prevention is worth more than a pound of cure. The following are eleven herbs or spices that have been shown to be effective in the prevention, treatment and reversal of many cancerous conditions.

Garlic

Several large studies have found that those who eat more garlic are less likely to develop various kinds of cancer, especially in digestive organs such as the esophagus, stomach, and colon. Ingredients in the pungent bulbs may keep cancer-causing substances in your body from working, or they may keep cancer cells from multiplying. I recommend a clove a day may be helpful [1-22] (Figure 1).



Figure 1: Cloves of garlic.

Cayenne pepper

Most people know cayenne pepper for its spice. But it is actually an extraordinarily strong antioxidant and vasodilator. Studies have shown that by consuming cayenne pepper is highly alkaline and a powerful buffer of dietary and metabolic acids that cause cells to become cancerous. If you consume it regularly you can neutralize the acids that cause body cells to become cancerous [23-29] (Figure 2).



Figure 2: Cayenne pepper.

Milk thistle

Milk thistle is a crucial plant when it comes to liver health and cancer prevention. Milk thistle and the seeds from the plant can be used to eliminate acidic toxins that can bind to the liver, causing damage to the liver setting the stage for a cancerous condition. It protects the alkaline interstitial fluids that surround everybody cell protecting them and indirectly preventing the formation of tumors, calcifications and/or cysts which make milk thistle a powerful antioxidant in the chelation of dietary and/or metabolic acids that cause cancer [30-64] (Figure 3).



Figure 3: Milk Thistle.

Turmeric

This orange-colored spice, a staple in Indian curries, contains an ingredient called curcumin (not the same as cumin) that might be useful in reducing cancer risk. According to the American Cancer Society, curcumin can inhibit some kinds of cancer cells in laboratory studies and slow the spread of cancer or shrink tumors in some animals. Turmeric is easy to find in grocery stores, and you can use it in a variety of recipes [65-130] (Figure 4).



Figure 4: Turmeric root and spice.

Bloodroot

Bloodroot is actually used in a medicine for treating cancer named Black Salve. You can use bloodroot on its own, because it has been shown in tests to be effective in shrinking of tumors [131-159] (Figure 5).



Figure 5: Bloodroot plant and flower.



wiseGEEK

Figure 7: Wheatgrass.

Feverfew

Feverfew was used in a study at a university in New York. The study found that it was great at killing off leukemia cells, even better than the actual cancer medication [160-191] (Figure 6).



Figure 6: Feverfew plant and flower.

Wheatgrass

Consuming one tiny glass of wheatgrass a day either orally or even-better rectally has shown to dramatically increase the health of cancer patients and non-cancer patients alike. It is particularly useful for people who are suffering from the side effects of chemotherapy. It will help purify the blood from dietary and/or metabolic acids, improve blood and lymph circulation, increase the oxygen levels in the microenvironments, and help the body repair and continue to reduce acids loads in the extracellular fluids, interstitial fluids and intracellular fluids to prevent and/or reverse and spoiling of the body cells [192-204] (Figure 7).

Ruscus aculeatus

This herb is always known as Butchers Broom and it is great at fighting cancer due to its active ingredient, ruscogenins. The active ingredient has been proven to shrink tumors and increase the cancer fighting cells in the body [205-221] (Figure 8).



Figure 8: Ruscus Aculeatus or Butchers Broom.

Sheep's sorrell

Sheep's Sorrell can be used in people who are suffering the harmful effects of cancer medications. It helps the tissues rebuild and get back to the condition that they were in before the cancer and medication to use it was introduced. Some have suggested that it can be used to ward off cancer cells and keep them from growing [222-224] (Figure 9).



Figure 9: Sheep's Sorrel.

Astragalus

This herb is grown in China and has been proven to help with cancer on a couple of different levels. First it boosts your body's immune system, which in turn helps it identify cancer cells. A study showed that cancer patients who took this herb survived twice as long [225-250] (Figure 10).



Figure 10: Astragalus.

Ginger

A new study reveals ginger contains a pungent compound that could be up to 10,000 times more effective than conventional chemotherapy in targeting the cancer stem cells at the root of cancer malignancy [251] (Figure 11&12).



Figure 11: Ginger root.



Figure 12: Research Shows the Efficacy of Ginger Root as a non-toxic form of chemotherapy.

The Authors of the Study Further Affirm these Points

“Cancer stem cells pose serious obstacle to cancer therapy as they can be responsible for poor prognosis and tumour relapse. To add into the misery, very few chemotherapeutic compounds show promise to kill these cells. Several researchers have shown that cancer stem cells are resistant to paclitaxel, doxorubicin, 5-fluorouracil, and platinum drugs [8, 16]. CSCs are thus an almost unreachable population in tumours for chemotherapy. Therefore any compound, that shows promise towards cancer stem cells, is a highly desirable step towards cancer treatment and should be followed up for further development.”

The researchers identified a variety of ways by which 6-shagoal targets breast cancer:

- A. It reduces the expression of CD44/CD24 cancer stem cell surface markers in breast cancer spheroids (3-dimensional cultures of cells modelling stem cell like cancer)
- B. It significantly affects the cell cycle, resulting in increased cancer cell death
- C. It induces programmed cell death primarily through the induction of autophagy, with apoptosis a secondary inducer
- D. It inhibits breast cancer spheroid formation by altering Notch signalling pathway through γ -secretase inhibition.
- E. It exhibits cytotoxicity (cell killing properties) against monolayer (1-dimensional cancer model) and spheroid cells (3-dimensional cancer model)

It was in evaluating the last mode of 6-shagoal's chemotherapeutic activity and comparing it to the activity of the conventional chemotherapeutic agent taxol that the researchers discovered an astounding difference. Whereas taxol exhibited clear cytotoxicity in the one-dimensional (flat) monolayer experimental model, it had virtually no effect on the spheroid model, which is a more “real world” model reflecting the 3-dimensionality of tumors and their stem cell subpopulations. Amazingly, this held true even when the concentration of taxol was increased by four orders of magnitude

“In contrast [to 6-shagoal], taxol, even though was highly active in monolayer cells, did not show activity against the spheroids even at 10000 fold higher concentration compared to 6-shagoal.”

This is a highly significant finding, as it affirms a common theme in cancer research that acknowledges the primarily role of cancer stem cells: namely, while conventional techniques like surgery, radiation, and chemotherapy are effective at reducing a tumor's size, sometimes to the point where it is “debulked,” “burned,” or “poisoned” out of the body even below the threshold of re-detection, the appearance of

“winning the battle” often comes at a steep price, as ultimately the cancer stem cell population regrows the tumors, now with increased vengeance and metastatic invasiveness, resulting in the cancer “winning the war.”

The monolayer model, which does not account for the complex immunity of actual cancer stem-cell based tumors against chemoagents like taxol, represents the old preclinical model of testing cancer treatments. The spheroid model, on the other hand, clearly shows that even 10,000 times higher concentrations of taxol are not capable of beating this ginger component at selectively targeting the root cause of the tumor malignancy.

In their concluding remarks, the authors point out a hugely important distinction between natural anti-cancer agents and conventional ones that have only been introduced in the past half century or so, namely, “Dietary compounds are welcome options for human diseases due to their time-tested acceptability by human bodies.”

Unlike modern synthetically produced and patented chemicals, ginger, curcumin, garlic, and hundreds of other compounds naturally found in the human diet, have been “time-tested” as acceptable to the human body in the largest and longest running “clinical trials” known: the tens of thousands of years of direct human experience, spanning thousands of different cultures from around the world, that constitute human prehistory. These experientially-based “trials” are validated not by RCTs, or a peer-reviewed publication process, but by the fact that we all made it through this incalculably vast span of time to be alive here today. Consider also that if our ancestors made the wrong dietary choice by simply mistaking an edible berry for a poisonous one, the consequences could be deadly. This places even greater emphasis on how the “time testing” of dietary compounds was not an academic but a life-death affair, and by implication, how the information contained within various cultural traditions as “recipes” passed down from generation to generation are “epigenetic inheritance systems” no less important to our health and optimal gene expression as the DNA in our own bodies.

Ultimately, this new study adds to a growing body of research indicating that cancer stem cell targeting approaches using natural substances present in the human diet for thousands of years are far superior than chemotherapy and radiation, both of which actually increase the relative populations of cancer stem cells versus non-tumorigenic ones [251].

Cannabis

Cannabis has been making a lot of noise lately. Multiple states across the United States and countries around the world have successfully legalized medical Marijuana, and the Uruguay parliament recently voted to create the world’s first legal marijuana market [252-256]. This is good news as the health benefits of Cannabis are vast, with multiple medical and scientific studies that confirm them. On the other hand, arguments against the use of marijuana are usually published in Psychiatric journals, which show no

scientific evidence that Cannabis is harmful to human health. All psychological evaluations from the intake of cannabis are largely based on assumptions, suggestions and observations [257]. When we look at the actual science behind Cannabis, the health benefits can be overwhelming. So what does one who opposes the use of cannabis base their belief on? Nothing, not scientific evidence anyways. The negative stigmatism attached to marijuana is due to it’s supposed psychotropic effects, yet again, there is no scientific evidence to show that marijuana has any psychotropic effects. Nonetheless, cannabis has recently been the focus of medical research and considered as a potential therapeutic treatment and cure for cancer (Figure 13).



Figure 13: Cannabis plant with buds.

Cannabis is a great example of how the human mind is programmed and conditioned to believe something. Growing up, we are told drugs are bad, which is true, however not all substances that have been labelled as “drugs” by the government are harmful. Multiple substances are labelled as a “drug” in order to protect corporate interests. One example is the automobile and energy industry, a car made from hemp is stronger than steel, and can be fuelled from hemp alone. Henry Ford demonstrated this many years ago. Hemp actually has over 50,000 uses [258]!

Let’s take a look at the science behind Cannabis and Cancer. Although Cannabis has been proven to be effective for a large range of ailments, this article will focus mainly on it’s effectiveness in the treatment of cancer. Cannabinoids may very well be one of the best disease and cancer fighting treatments out there. Cannabinoids refer to any of a group of related compounds that include cannabiol and the active constituents of cannabis. They activate cannabinoid receptors in the body. The body itself produces compounds called endocannabinoids and they play a role in many processes within the body that help to create a healthy environment. Cannabinoids also play a role in immune system generation and re-generation. The body regenerates best when it’s saturated with Phyto-Cannabinoids. Cannabinoids can also be found in Cannabis. It is important to note that the cannabinoids are plentiful in both hemp and cannabis. One of the main differentiations

between hemp and cannabis is simply that hemp only contains 0.3% THC while cannabis is 0.4% THC or higher. (Technically they are both strains of Cannabis Sativa.) Cannabinoids have been proven to reduce cancer cells as they have a great impact on the rebuilding of the immune system. While not every strain of cannabis has the same effect, more and more patients are seeing success in cancer reduction in a short period of time by using cannabis.

While taking a look at these studies, keep in mind that cannabis can be much more effective for medicinal purposes when we eat it rather than smoking it. Below are 20 medical studies that prove cannabis can be an effective treatment and possible cure for cancer [259-288]. Please keep in mind that this is a very short list of studies that support the use of medicinal marijuana. Please feel free to further your research, hopefully this is a good starting point.

Brain Cancer

A study published in the *British Journal of Cancer*, conducted by the Department of Biochemistry and Molecular Biology at Complutense University in Madrid, this study determined that Tetrahydrocannabinol (THC) and other cannabinoids inhibit tumour growth. They were responsible for the first clinical study aimed at assessing cannabinoid antitumoral action. Cannabinoid delivery was safe and was achieved with zero psychoactive effects. THC was found to decrease tumour cells in two out of the nine patients [289].

A study published in The Journal of Neuroscience examined the biochemical events in both acute neuronal damage and in slowly progressive, neurodegenerative diseases. They conducted a magnetic resonance imaging study that looked at THC (the main active compound in marijuana) and found that it reduced neuronal injury in rats. The results of this study provide evidence that the cannabinoid system can serve to protect the brain against neurodegeneration [290].

A study published in The Journal of Pharmacology And Experimental Therapeutics already acknowledged the fact that cannabinoids have been shown to possess antitumor properties. This study examined the effect of cannabidiol (CBD, non psychoactive cannabinoid compound) on human glioma cell lines. The addition of cannabidiol led to a dramatic drop in the viability of glioma cells. Glioma is the word used to describe brain tumour. The study concluded that cannabidiol was able to produce a significant antitumor activity [291].

A study published in the journal Molecular Cancer Therapeutics outlines how brain tumours are highly resistant to current anticancer treatments, which makes it crucial to find new therapeutic strategies aimed at improving the poor prognosis of patients suffering from this disease. This study also demonstrated the reversal of tumour activity in Glioblastoma multiforme [292].

Breast Cancer

A study published in the US National Library of Medicine, conducted by the California Pacific Medical Centre determined that cannabidiol (CBD) inhibits human

breast cancer cell proliferation and invasion. They also demonstrated that CBD significantly reduces tumour mass [293].

A study published in The Journal of Pharmacology and Experimental Therapeutics determined that THC as well as cannabidiol dramatically reduced breast cancer cell growth. They confirmed the potency and effectiveness of these compounds [294].

A study published in the Journal Molecular Cancer showed that THC reduced tumour growth and tumour numbers. They determined that cannabinoids inhibit cancer cell proliferation, induce cancer cell apoptosis and impair tumour angiogenesis (all good things). This study provides strong evidence for the use of cannabinoid based therapies for the management of breast cancer [295].

A study published in the Proceedings of the National Academy of Sciences of the United States of America (PNAS) determined that cannabinoids inhibit human breast cancer cell proliferation [296].

Lung Cancer

A study published in the journal Oncogene, by Harvard Medical Schools Experimental Medicine Department determined that THC inhibits epithelial growth factor induced lung cancer cell migration and more. They go on to state that THC should be explored as novel therapeutic molecules in controlling the growth and metastasis of certain lung cancers [297].

A study published by the US National Library of Medicine by the Institute of Toxicology and Pharmacology, from the Department of General Surgery in Germany determined that cannabinoids inhibit cancer cell invasion. Effects were confirmed in primary tumour cells from a lung cancer patient. Overall, data indicated that cannabinoids decrease cancer cell invasiveness [298].

A study published by the US National Library of Medicine, conducted by Harvard Medical School investigated the role of cannabinoid receptors in lung cancer cells. They determined its effectiveness and suggested that it should be used for treatment against lung cancer cells [299].

Prostate Cancer

A study published in the US National Library of Medicine illustrates a decrease in prostatic cancer cells by acting through cannabinoid receptors [300].

A study published in the US National Library of Medicine outlined multiple studies proving the effectiveness of cannabis on prostate cancer [301].

Another study published by the US National Library of Medicine determined that clinical testing of CBD against prostate carcinoma is a must. That cannabinoid receptor activation induces prostate carcinoma cell apoptosis. They determined that cannabidiol significantly inhibited cell viability [302].

Blood Cancer

A study published in the journal Molecular Pharmacology recently showed that cannabinoids induce growth inhibition and apoptosis in mantle cell lymphoma. The study was supported by grants from the Swedish Cancer Society, The Swedish Research Council and the Cancer Society in Stockholm [303].

A study published in the International Journal of Cancer also determined and illustrated that cannabinoids exert antiproliferative and proapoptotic effects in various types of cancer and in mantle cell lymphoma [304].

A study published in the US National Library of Medicine conducted by the Department of Pharmacology and Toxicology by Virginia Commonwealth University determined that cannabinoids induce apoptosis in leukemia cells [305].

Oral Cancer

A study published by the US National Library of Medicine results show cannabinoids are potent inhibitors of cellular respiration and are toxic to highly malignant oral Tumours [306].

Liver Cancer

A study published by the US National Library of Medicine determined that that THC reduces the viability of human HCC cell lines (Human hepatocellular liver carcinoma cell line) and reduced the growth [307].

Pancreatic Cancer

A study published in The American Journal of Cancer determined that cannabinoid receptors are expressed in human pancreatic tumor cell lines and tumour biopsies at much higher levels than in normal pancreatic tissue. Results showed that cannabinoid administration induced apoptosis. They also reduced the growth of tumour cells, and inhibited the spreading of pancreatic tumour cells [308].

Conclusion

According to a 2004 report by Morgan, Ward, and Barton: "The contribution of cytotoxic chemotherapy to 5-year survival in adult malignancies. ... Survival in adults was estimated to be 2.3% in Australia and 2.1% in the USA." Jun 16, 2014 [309].

Medical oncologists are a long way from using medicinal herbs as an alternative or primary treatment for cancer. The research is significant and shows that the medicinal herbs discussed in this article are extraordinary plants and have shown excellent results in the prevention, treatment and reversal of many cancerous conditions.

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